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The Status of Official Drugs Versus Non-Official

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American pharmacy is confronted with a very embarrassing situation in that the professional courses now required for registration are longer and more exacting and the demand for professional pharmaceutical services seems to be diminishing. The manufacture of official preparations which a few decades ago was almost entirely in the hands of the retail pharmacists themselves, has almost all been given over to the large scale manufacturers. In addition there is a great volume of business in non-secret medicines which physicians are induced to prescribe by name instead of writing a detailed prescription for each patient. This has led to the development of commercialism in pharmacy to a degree not yet experienced in other countries, and the independent pharmacist who desires to maintain his professional status is having a difficult time to hold his own.

Many of the official preparations can be prepared and standardized more efficiently by the large pharmaceutical companies, than by pharmacists in drug stores. It is also true that these companies, through research, from time to time, develop new remedies that have merit. These companies deserve a great deal of credit for their services to the medical profession. Let it be clearly understood, that it is not the intention of your Extension Committee to do or say anything that would in any way cast adverse reflections on any corporation that is actually rendering a professional service to medicine and pharmacy. It is not the intention of the Extension Committee to express an opinion on the merits of advertised brands of chemicals and pharmaceuticals. The individual companies have done that quite successfully. It is our plan to state facts as we believe they should be given, in the interest of professional pharmacy, in the interest of improved prescribing, and in the interest of the patient.

In undertaking a task of this kind, we shall, therefore, from time to time, give information to physicians and pharmacists, who express a desire for such information, on the comparative cost and composition of various trade marked preparations, when these preparations are identical or closely related to an official preparation, and to give the cost of the active ingredients used in specialties when the prices seem exhorbitant.

The members of the Extension Committee have been trained as ethical professional pharmacists. They realize that it is not their business to attempt to dictate to the physicians what medicines they shall use in their practice. We have been trained to believe our job is to give the physicians what they desire without asking questions. This the professional pharmacists have done for generations, and while doing so have watched your specialty pre-

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scription ingredients increase greatly in number. We have watched the prescription stock of drug stores increase in value and their income decrease on this stock. We have watched your patients pay higher prices for their medicine and we have watched the pharamcists' profits slip from the cash register into the hands of pharmaceutical houses to pay for brand or patent names.

The Extension Committee belives you do not desire that such conditions should exist. We believe you have your patients' interest at heart. We believe as one profession to another you desire to work to our interest, after the patient has been adequately cared for. We have watched these things happen and have said nothing. We have watched your offices become filled with samples, which then pass into the hands of your patients. We know these same patients come into drug stores and call for these preparations by name. We know some of your patients are practicing self-medication as a result of these samples. We know self-medication is a practice undesirable to the best interest of professional medicine, and we are led to believe you are becoming confused by the great number of specialties that come into your office.

With these thoughts in mind, the pharmacists of South Carolina through the cooperation of the University Extension Division and the School Pharmacy, as well as the pharmacists in many other states, are attempting to encourage physicians to write prescriptions for more of the official medicines. It is believed by so doing you will help solve a problem that is confronting both the pharmacy and the medical professions.

In promoting more interest in official medicines, we in South Carolina are not instigating something new. We are following examples set by several other states; among them are New Jersey, Maryland, West Virginia, Illinois and Mississippi. Georgia has done some work and is now planning an intensive statewide publicity program. This is not a problem of pharmacists alone, it is a problem of physicians, teachers of pharmacy and teachers of medicine. The Extension Committee is proud to announce that many of our outstanding leaders of medicine have endorsed this program. Thirty-five per cent of the physicians in South Carolina have expressed their desire to support a movement they believe will help them as well as their patients.

The thought in the minds of all who have interested themselves in this work, center around three recognized evils of pharmacy and medicine. These evils are substitution, counter-prescribing and self-medication. If the use of samples, with the original label attached, in medical practice could be eliminated, and prescriptions written for the various medicinals desired in such a manner that the patient would be unable to interpret them, the problem of self-medication would be greatly improved.

A true story told me only recently by a retail pharmacist, will, I believe, forcibly illustrate the sample problem. A physician, after diagnosing the case, handed his patient a sample of a proprietary medicine. In a comparatively brief period of time one pharmacist sold this same preparation to eighteen different people. Each sale was made as a result of one person telling another and all going back to the original sample. The pharmacist made a notation of the names of the purchasers and later submitted the names to the physician. The physician recognized ten of these people as his patients. Has this physician promoted self-medication? Are you giving away samples? If you are, our committee believes no better scheme could be devised to promote this practice. This results in a financial loss to you. Self-medication is a practice we all try to discourage.

Counter-prescribing — Our Committee does not attempt to justify counter-prescribing under any conditions. We believe, however, that when physicians prescribe and send their prescriptions to drug stores to be compounded, less counter-prescribing will be observed. We shall in our program do everything we can to discourage this practice.

Substitution — We strongly condemn this practice and recommend that pharmacists purchase chemicals and pharmaceuticals from only the most reliable companies recognized for their high quality medicinals. Before pharmacists can expect this program to succeed they must see that this important part of their work is adequately taken care of. The com-

mittee believes, however, that if more official medicines are prescribed there will be less substitution.

A few weeks ago a physician wrote that before pharmacists could expect much cooperation from physicians, they would have to clean house themselves. The Committee recognizes that much house cleaning would be in order, but let it be borne in mind that this program is being promoted and financed by an educational institution, from the standpoint of benefits that will be received by the patient. If you prescribe to the best interest of the patient, the committee and the pharmacists of the state can ask for no more. When this is done we believe you will be benefited, and we know the pharmacists will be better satisfied.

If you prescribe to the best interest of the patient, self-medication and counter-prescribing will be discouraged. The problem of substitution will be greatly improved. The use of chemicals and preparations of unknown composition will be abandoned. Ethical pharmaceutical practices will be encouraged and a better understanding between pharmacists and physicians will be promoted. Prescription profits will increase and prescription costs will decrease. When this is done the patient will have more money to pay the physician for his services and to pay the pharmacists for the medicine he has received.

To illustrate, a pharmacist in our state related the following condition that exists in his store. Physicians are sending to this store on an average fourteen prescriptions per week calling for a medicine by a trade name, composed of two common basic official drugs. This prescription had to sell for $1.75. The pharmacist stated that if the physician had written for the two official ingredients, the prescription could have been compounded and sold for $1.00, and his profits on the money invested would have been greater. If this saving of $0.75 is multiplied by fifty two weeks and then by the number of stores in the state the figure becomes quite significant, a total of $260,000.00 per year. We know of course this identical prescription would not be filled in all stores to the same extent, but we do know that this store, as a representative of a typical store in South Carolina, fills many other prescriptions each week illustrating this same point. The total amount that might be saved in South Carolina would at best be difficult to estimate.

Dr. Bernard Fantus of the University of Illinois in the March 19th issue of the Journal of the A. M. A. states. "In such large institutions as the Cook County Hospital, the saving resulting from cooperation between prescribing physicians and dispensing pharmacists might easily run into such a huge sum that I hesitate to mention it."

We believe you are interested in your patients and in pharmacy. I base this belief in part by the magnificant response you have shown in reply to my letter of April 8th; more physicians and pharmacists have expressed their willingness to aid in the promotion of this endeavor as a result of this one letter, than we had hoped to expect. Other states have not had as much interest manifested even after a much longer period of time. The Committee believes this is because the time is ready for such a program, and that we are especially fortunate in being able to interest such men as the president of our state university, the dean of administration and the director of the extension division, in this work. The Committee believes, you believe in these men. We believe you have confidence in our program.

A few remarks that have been made by men of national prominence, further lead me to believe physicians in general are interested in the future of pharmacy. First let me quote Dr. J. Leon Lascoff, nationally known professional pharmacist of New York City. "I believe that in the history of our two professions never has the physician been so interested in pharmacy and in what the intelligent cooperation of pharmacists can do for him and his patients.

Dr. H. V. Arny, Dean of the School of Pharmacy of Columbia University states, "Thinking physicians realize that the ideal administration of medicine is by means of carefully thought out prescriptions, and by the prescribing of hundreds of elegant and effective preparations found on the pages of the U. S. P. and N. F."

Charles E. Wilson, Director of U. S. P. and N. F., says, "Both professions have a place in the world, both have definite obligations to the

public. We cannot meet these obligations when we permit petty jealousy to cloud the issue."

"Our ideals can be accomplished through honest and sincere cooperation. We need you—you need us."

Until we have this cooperation, pharmaceutical associations, pharmacists, extension divisions and the physician himself will be handicapped in their efforts in rendering the most efficient service to patients who are compelled to pay, too often for a protected name, and receive in return no more benefits than could have been expected from the less expensive official medicine.

In training students for pharmacy, teachers are compelled to place the main emphasis of their teaching on the official medicines. It is in this phase of pharmacy that these young men and women can serve you best. It is practically impossible for even an old and experienced pharmacist to be familiar with all the new remedies he is forced to purchase.

"With closer relationship both professions can and will improve, mentally, physically and financially. It means also that with this improved relationship petty jealousy is not permitted to cloud the issue to the extend that both professions forget their duty to humanity, which in reality is our only excuse for either being pharmacist or physician.

There are many physicians in South Carolina who are desirous of changing these deplorable conditions, but their thoughts and desires amount to nothing unless they can find among the pharmacists a corresponding disposition."

In this Extension Program, the committee realizes one of your most serious problems is going to be to find pharmacists who are equipped or even willing to help you in this endeavor. In order to make this program as effective as possible, we shall, therefore, strive to create among our own profession that disposition so necessary for the success of any cooperative program.

Some Problems in the Conduct of Labor

By J. D. Guess, M. D., Greenville, S. C.

The remarks that I shall make will convey no new information to you. They will be in conformity with your own knowledge and experience. However, the finding that we think alike will serve to further convince you of the soundness of your own belief and may help you to follow more tenaciously the dictates of your own obstetrical conscience and to hesitate to take chances in the conduct of labor which are against your better judgment. Furthermore, I shall try to bear in mind that most of you practice in small towns and in rural areas, and that most of your deliveries are conducted in the homes of your patients, and that problems of delivery in such environment are utterly different in their solution from those of hospital deliveries. Furthermore, I am keenly aware of the fact that your problems are handled very differently from the way such problems are handled by such delivery services as that of the Chicago Maternity Center where more or less well trained assistance and adequate, properly prepared supplies are available on short notice. When such men as Dr. Lee state that it is safer to have a baby at home than it is in the hospital, I think they are unfair to doctors whose home deliveries are conducted under conditions such as are yours and mine, and that they are unfair as well to all but the most careless hospitals. A careless or an unscrupulous obstetrical attendant is even more dangerous in the home than he would be in even a fairly well operated hospital.

Delivery conducted in the homes of patients for whom we practice presents problems in complicated cases which are peculiar not only because of the unsuitable environment but also because of lack of trained assistance and suitable supplies. In such complicated cases we may justly claim extenuating circumstances when the outcome is unfortunate. But in nor-

mal cases and in cases where they would have continued in a normal manner had we not in haste or because of an exercise of faulty judgment interfered we can claim no such immunity to criticism.

The primary problem of the obstetrical attendant is to preserve the life and the health of the woman in labor, to deliver an uninjured baby, and to prevent such maternal suffering as he can without unduly jeopardizing the life or the health of either mother or baby. In so far as he fails to accomplish these, has he failed to justify his attendance on the case.

The early and preparatory step in solving this problem has to do with the matter of antenatal care. Antenatal care is often neglected, and yet both statistics and ordinary reasoning point conclusively to its value. Unfortunately many of our physicians have not given this matter the attention which it deserves and are not aiding in educating the public to demand such care.

In briefly summing up what is accomplished by careful antenatal medical care, one might say that it yields a knowledge of maternal defects and deviations from the normal course of pregnancy and offers an opportunity to correct and remedy them; it brings to the physician a knowledge of existing disproportion between the sizes of the maternal pelvis and the fetal head when such exists and allows him to prepare for resulting difficulties in labor; and it develops confidence on the part of the patient which tends to alleviate her suffering and assures a greater degree of cooperation from her.

Studies of maternal mortality by the Committee on Maternal Welfare show conclusively that the principal causes of obstetrical death are albuminuria and eclampsia (32.2%), sepsis (22.1%) and hemorrhage (13.4%).

Eclampsia may occur before the onset of labor, during labor or in the puerperium. Modern obstetrical experience well supported by statistics support the dictum, "In prepartum and intrapartum eclampsia treat the eclampsia and disregard the pregnancy." There are few exceptions to this, and none except in a good hospital. Any effort at quick delivery, except possibly cesarean section under local anesthesia, adds to the already overburdened maternal organism, without any compensatory increase in chances of saving the baby. Any efforts at induction of labor or in hastening labor should be reserved until such time when convulsions are under control. The matter of the medical treatment of eclampsia cannot be gone into extensively. However, it consists in glucose solution intravenously, the intravenous or intramuscular administration of magnesium sulphate solution, morphine and other sedatives, rest and quiet. Sodium amytal or nembutal in moderate doses may be given by rectum to unconscious patients. Blood letting, colonic lavage, gastric lavage, inhalation of chloroform, veratrum and sweating appear to be not only valueless but actually harmful. Digitalis is of value in preventing circulatory failure, and atropine is valuable when edema of the lungs occur. Treatment such as this can be given very satisfactorily in the home, but it requires the almost constant attendance of the physician until the convulsions are controlled.

If convulsions occur after labor has begun, labor will probably proceed rapidly and terminate spontaneously. This fact should be borne in mind, and measures taken to protect the mother against infection and hemorrhage.

If antepartum convulsions occur labor frequently begins spontaneously. If it does not it is wise, in most instances, to induce labor after the convulsions have been controlled and the woman has regained consciousness and is definitely better. This may be done in one of two ways. The membrances may be instrumentally ruptured. This is the surer and better way, but catheter or bougie induction may be done if preferred. Since the indication is definite and time is a factor, it is usually unwise to attempt medical induction first, for so frequently this fails. In certain infrequent cases, cesarean section may be advisable.

Puerperal sepsis is usually an indication of a break in technique during labor or delivery. It is true that endogenous infections do occur and, perhaps, more frequently than was once admitted. Similarly there at times occurs an extension or a lighting up of a previously existing gonorrhea, giving rise to a septic-like febrile puerperium. The role of anaerobic cocci, already in the vagina, as a cause of throm-

botic pelvic infections in the puerperium has in recent years come into prominence. The patient herself may transmit infections with her fingers, as she indulges in the frequent practice of handling the vulva during labor. To guard against this, her hands should be thoroughly cleansed early in labor and she should be warned to keep her hands away from the perineal region.

However, admitting the truth of all that has been said, most serious infections are introduced by the attendant with his hands, his instruments or by droplet infection from his nasopharynx. This latter is perhaps the most frequent cause of the dreaded streptococcic infections, and it can be effectively guarded against if the doctor wears a mask covering nose and mouth during the conduct of labor.

One cannot be expected to even approximate hospital conditions in the poorer homes. The expense would be prohibitive, and it is hardly necessary in normal cases. But by training and care one can learn to very adequately protect his patient against hand borne and instrument borne infection.

First the patient should be prepared by shaving the vulval hair. It is impossible to cleanse the vulva or to keep it clean while the hair remains. A safety razor with blades is inexpensive and convenient. After shaving the vulva the perineum should be scrubbed with soap and water, Lysol may be added if desired. This cleansing should be repeated frequently and always before any vaginal examination and before delivery. The use of the various colored antiseptics or iodine adds nothing to the asepsis or antisepsis.

With rubber gloves as cheap as they are, there is little excuse for failure to utilize the protection which they afford to both the patient and the doctor. I can see little reason for their heat sterilization in the average home delivery. The doctor has so many duties to perform, that it would be impossible to keep them sterile. But rubber is more adaptable to cleansing than is the skin and when grossly contaminated with known pathogenic organisms the gloves can be boiled or discarded. It is good practice to scrub the hands while allowing the gloves to lie in lysol solution. After putting on the gloves, increase the strength of the solution and frequently submerge the gloved hands in this stronger solution. This technique provides a relatively sterile but restricted field and relatively sterile hands. So far as possible one's activities should be restricted to this limited field.

Sterile instruments present a different problem. It is usually impracticable to boil instruments in the rural home. It takes time to build a fire, heat water, boil them for ten to twenty minutes and allow them to cool. Sterilization by immersion in lysol or cyanide solution is inadequate unless there is much time.

It is suggested that rustless steel instruments be used. These may be sterilized by boiling in the office. They then may be carefully wrapped in a sterile towel or kept in a closely covered sterilizer. With them may be included suture material and cord tape.

What about vaginal examinations? Granting for the sake of argument that this is the only satsifactory mode of examination during labor, there are still far too many such examinations made. The greater the number, the greater is the risk of serious infection. Those made after rupture of the membrances, but before the head has passed through the cervix are more dangerous than are vaginal examinations either before rupture of the membranes or after the head has reached the perineum.

But examination per vaginam is not the only satisfactory method of examination. Experience with young interns convinces me that satisfactory rectal examinations are not difficult to learn and that in most instances they yield satisfactory information as to the degree of cervical dilatation and of descent of the head. It is more difficult to recognize position through the rectum, but the easiest way to determine position is by abdominal palpation. Rectal examinations protect the patient, and they conserve the doctor's time, for they require no hand sterilization or patient preparation. The same gloves used for delivery should not be used for rectal examination. Rubber finger cots are inexpensive and quite practical.

Hemorrhage can be treated of only briefly. There are two great causes of postpartum hemorrhage. The most serious is traumatism caused by operative delivery or delivery forced by the administration of pituitrin. These cases

are serious because the cause of the hemorrhage is frequently not promptly recognized, when the cause is discovered, the bleeding is frequently very difficult to control especially with poor assistance, poor light and poor position of the patient, and finally the hemorrhage is superadded to traumatic shock. The most frequent cause of postpartum hemorrhage is forcible efforts to hasten detachment of the placenta, which so frequently give rise to incomplete detachment in a uterus which is in the physiological resting period between the second and third stages of labor. Simple expression is a safe procedure, but it presupposes a recognition of placental separation and descent.

It should be remembered that much of the fluidextract of ergot is inert or almost so. The use of one of the newer of forms ergonovine alkaloid, ergoklonin, ergotrate, et cetera, is advisable and will help to reduce the incidence of hemorrhage.

Finally, the obligation of the physician to remain with his patient for a full hour after the termination of the third stage of labor—the obstetrician's hour—must be stressed. Adherence to this will save lives, and there is no substitute for it.

Although most labors will, if given sufficient time, terminate spontaneously, an occasional case will require interference. Interference in the home without adequate assistance and solely in the interest of the baby is not warranted. The risk to the mother is too great and the baby's chances of survival are usually not materially increased.

It should be remembered that the baby's chances are not jeopardized by long labor except as it applies to the perineal stage. It should be further borne in mind that rest is more imperative than immediate delivery when the patient becomes exhausted from long or hard labor, and that morphine is frequently life saving, where interference would prove deadly. How often are those who do much consultation obstetrics impressed with this fact.

Interference increases manifold the dangers of infection, and introduces the danger of serious trauma with its attendant incidence of hemorrhage and shock. Last year in South Carolina at least 28 women died as a result of or in spite of forceps delivery, 19 died after podalic version, 6 died after cesarean section, and 6 died after multiple attempts at delivery. Unfortunately, instrumental delivery infrequently improves the baby's chances at survival, and so frequent auscultation of the fetal heart tones has little value in home deliveries.

When operative delivery is clearly indicated there is usually no great need of haste, and every effort should be made to plan the set-up and the procedure with the greatest deliberation, and if possible medical assistance should be secured. In a number of the better maternity hospitals there is a definite rule, that before operative interference in labor and before cesarean section consultation must be had. Evidently these hospitals feel that haste is not essential, and incidentally it might be added that the requirement of consultation has greatly reduced the incidence of operative interference.

Anesthesia and analgesia in labor can not be discussed. Suffice it to say that it is the writer's belief that none of the newer methods of obstetrical analgesia are safely adaptable to home deliveries. We must still rely upon morphia, morphia and small doses of scopolamine, with or without added chloral hydrate, for pain alleviation during the first stage of labor and intermittent inhalations of either ether or chloroform in the late second stage. Personally, the writer prefers chloroform for intermittent administration. He finds it almost as satisfactory as nitrous oxide and oxygen, and he has never recognized any harmful effects in either mother or baby from its use in this manner, except a slightly greater tendency toward postpartum bleeding, and an occasional apnoec baby, and in these cases the drug has been too generously administered either by nurse or doctor. For prolonged anesthesia ether should be used.

It would be interesting to speak of episiotomy, perineal repair, retained placenta and peculiar dangers of podalic version which are seemingly so lightly undertaken by so many doctors, but time forbids.

Modern Usage of Digitalis

By JOHN A. BOONE, M. D., CHARLESTON, S. C.
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The story of digitalis runs through the history of medicine much like that of the hero in a Horatio Alger novel, with many ups and downs, frequent misunderstanding, but eventually winning out triumphantly over great odds. The drug was known to the ancients, who used it in many of their concoctions with no understanding of its action. The discovery of its properties in treating heart disease began when William Withering in 1775 singled it out of the brew of the old woman of Shropshire as the diuretic which caused so many of her remarkable cures of dropsy. After a few years, however, its chief clinical use had come to be in tuberculosis, and its effect in dropsy was largely forgotten. By some fifty years afterward its use had been restricted to cases of heart affections, but with little understanding of its real action or special indication. Toward the end of the nineteenth century Sir James Mackenzie, and later Sir Thomas Lewis, demonstrated its effect in slowing the tachycardia accompanying auricular fibrillation. So widespread was the influence of these men and the acceptance of their work that the use of digitalis was for years largely restricted to cases showing auricular fibrillation. In the past twenty years, however, due especially to the efforts of certain American physicians, the conviction has grown that the drug has a special beneficial effect on failing heart muscle regardless of the presence or absence of auricular fibrillation.

While the physiological mechanism through which digitalis exerts its effects are not yet by any means clear, it will be useful to consider two probable modes of action: the muscular effect, and the block-producing effect. First, it has a direct action on heart muscle whereby its tone is increased and its muscular bundles are shortened. While the analogy may not be exactly comparable, it may help to consider an elementary experiment in physiology: if a frog's gastrocnemius muscle is electrically stimulated while an increasing stretching force is applied to it, the force of the kick increases with the amount of stretch applied up to a certain critical point, beyond which the force diminishes. We all know that as the load the heart has to bear increases, it dilates and hypertrophies in an attempt to meet the strain. We might regard heart failure as the time when the stretching of the muscle fibers has gone beyond a certain critical point and further dilatation results in a weaker rather than a stronger beat. Digitalis, by increasing the tone of the heart muscle, shortens the fibers until they are back on the safe side of the critical point. This action of digitalis was known to the early experimental physiologists of the last century, but was neglected in the enthusiasm over the work of Mackenzie and Lewis on fibrillation.

Second, digitalis is able to slow the heart in auricular fibrillation. In this arrythmia, the ventricular conducting system is bombarded by very rapid electrical waves of varying rate and strength arising in the fibrillating auricles. The ventricles respond to as many of these impulses as their refractory period will allow, but because of insufficient diastolic filling at this rapid rate, they are placed at a disadvantage and lose much of their efficiency in propelling the blood. By its ability to increase the electrical block at the auriculo-ventricular junction, digitalis prevents the passage to the ventricles of all but a few of the stronger auricular impulses, resulting in a still irregular, but slower and more efficient beat. With this effect added to its direct muscular action, it is easy to see why the most spectacular therapeutic effect is obtained in heart failure accompanied by auricular fibrillation.

In large enough doses, digitalis is a poison, so that evidences of its toxic action should be reviewed briefly. Some of the more common symptoms are general malaise, headache, mental confusion, anorexia followed by nausea and vomiting, diarrhea and visual disturbances. Among these nausea and vomiting are common-

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ly the most useful symptoms of overdosage. A fact that has struck me especially forcibly is that negroes are not nearly as apt as white people to show nausea and vomiting as a toxic symptom, so that other evidence of toxicity should be looked for with some care in the colored race. Another point is worth mentioning here: I have several times heard practitioners say that they use a certain brand of digitalis because it seems less nauseating than some others. But it is a fact that this nauseating property of digitalis is, as far as our present knowledge goes, inseparably tied to the therapeutic action of the drug. So when a drug salesman says to you that his brand of digitalis is less nauseating than the others, he is admitting to you that his brand is less potent therapeutically than the others. Among the objective signs of toxicity are various degrees of auriculo-ventricular block, as shown by a markedly increased P-R interval in the electrocardiogram or by dropped beats; the occurrence of extrasystoles, most often ventricular in origin, and frequently leading to a coupled beat; conspicuous slowing of a previously regular heart through depression of the normal pacemaker, which is not to be expected in a regular heart; the onset of ventricular tachycardia, especially the type which shows in the electrocardiogram an alternate reversal in the direction of the QRS complexes, which is a result of marked overdosage and often presages the occurrence of ventricular fibrillation and death.

There are certain contraindications to the exhibition of digitalis. First may be mentioned the occurrence of auricular fibrillation *without* congestive heart failure in the various "toxic states," such as hyperthyroidism, acute rheumatic fever, pneumonia, nephritis and septicemia. It is well known that slowing of the rate is apt to be difficult in these circumstances, and moreover a considerable body of evidence in the form of mortality statistics is beginning to indicate that digitalis is directly harmful in them. The specific reasons for this have not yet become clear enough to state with certainty. There is still some debate as to its indication when the fibrillation is accompanied by congestive failure, but the weight of evidence and opinion appears to indicate that the drug should be given here as in congestive failure from any other cause. In angina pectoris there is no hard and fast rule, but the attacks in general are made worse unless failure is present, when the majority will be benefitted by digitalis. There is some experimental evidence that in animals the heart's tolerance to digitalis is somewhat diminished following a coronary thrombosis. This should be considered a caution against overdosage rather than a contraindication to its use if the thrombosis is followed by congestive failure.

One of the clearest contraindications to the use of digitalis is vascular shock. Before the studies of surgical shock during and following the world war, there was frequently no sharp distinction made between circulatory failure due to paralysis of vascular tone and that due to failure of the heart as a pump. This led to the administration of digitalis to patients who "went bad" during various medical or surgical procedures and diseases, and to its prophylactic use when the onset of such difficulties was apprehended. The effect of digitalis on *normal* heart muscle is to contract the heart and to *decrease* rather than increase the output of blood for each beat. Thus in shock, where the effective blood volume is already decreased, the further adverse effect of diminishing the output of the heart is easily appreciated.

With reference to the dosage of digitalis, the need for individualization in each patient cannot be too strongly emphasized. While in any one patient the required amount of digitalis varies somewhat in proportion to the degree of congestive failure, patients will vary a great deal among themselves as to the actual amount required to produce a given therapeutic effect. In the majority of patients in only mild failure, the calculated dose on the basis of body weight will usually suffice to digitalize. In most of those with extreme failure, the drug must be pushed to the sub-toxic level and there maintained. It is a very rare patient who, having once been digitalized for congestive failure, should ever be allowed to discontinue the taking of digitalis throughout the remainder of his life.

In the form of administration, few preparations ever have any advantage over the pills of powdered leaf, which are accurate in dos-

age, do not readily deteriorate and are relatively cheap. The tincture is a notoriously inaccurate form in which to prescribe it, being subject to evaporation and more rapid deterioration, and the wide variation in dosage from measurement with a medicine dropper. In diluted form, it is useful for rectal administration to patients who for any reason cannot take the drug by mouth. The indications for parenteral administration are extremely rare, and the use of these preparations should be appropriately restricted.

Because of the short time available, I have had to treat many phases of this subject rather sketchily, but I hope I have given you a useful brief summary of modern digitalis therapy.

Fractures--Immediate Care--Treatment After Care--Expected Disability*

By Austin T. Moore, M. D., and James T. Green, M. D., Columbia, S. C.

The treating of fractures is indeed as old as medicine itself, and since the beginning of medical history the recovery of function has been considered of primary importance. However, function of the injured member is not always dependent upon a perfect alignment of the bone fragments, so this phase is given only secondary consideration.

During the ancient times rules of procedure grew up which were so tenacious and enduring that in the nineteenth century it was a general rule that the setting of fractured bones must not be done too soon, nor delayed too long. It was thought muscular resistance and swelling opposed immediate reduction and it was the custom to permit the swelling to come and go before reposition was attempted. Even today, there is a school of thought, small in its number of men, which advises that each fracture has a definite day to be set. This idea certainly has at least one good point in that there is no inconvenience to the surgeon and every operation can be scheduled ahead of time. Today, however, every fracture is considered an emergency. There is no such thing as a simple fracture which can be laid aside and treated at the convenience of the surgeon. The earlier a bone is set after injury, the less will be the swelling. Fractures which have been properly reduced become increasingly more comfortable.

*Read before The Second Annual State-Wide Safety Conference, Columbia, S. C., November 18, 1938.

FIRST AID IN FRACTURES

The immediate care of fractures is divided into the first aid treatment as given by the safety workers in various organizations and the surgical care received in a well equipped hospital. The old axiom which gained popularity during the World War, "splint them where they lie," is one of great importance. The rough handling of fractured bones cannot be too strongly condemned. All of you have seen injured individuals picked up carelessly and rushed to a first aid station without due consideration of a broken arm or leg. All of you have seen football players who have been knocked unconscious carried from the field with arms and legs or the head dangling. Unintentional roughness by fellow workers or friends at the scene of the accident, when all are somewhat excited, may do enough damage to the nerve or blood supply so that the usefulness is partially or completely lost. This type of handling may mean the difference between complete recovery, partial or total disability—or even death. Many patients with spinal injuries may be made worse or permanently paralyzed because of inadequate knowledge of transportation. The spinal cord may be completely severed by carrying the patient in a folded jack knife position rather than being carried on a stretcher face downward. When a tourniquet has to be applied to control hemorrhage, it is necessary that it be properly placed with pressure that is neither

too small nor too great. Inadequate pressure will prolong bleeding because only the return flow of blood from the part is obstructed. If pressure is too great damage is done to muscle and nerve tissue. The immediate care by the surgeon consists of the control of hemorrhage, shock and pain and the reduction of the bone fragments.

CARE OF SIMPLE FRACTURES

In the treatment of simple fractures the fundamentals are those of realignment of the fragments into good position and then adequate immobilization until bone healing is complete. Occasional wiggles by a curious surgeon to see if there is good union may be the cause of delayed union, or non-union. Prolonged swelling of the part must be prevented. Whenever the swelling persists many changes take place within the joints, muscles, nerves, tendons, etc., which may give a permanent disability. Adhesions are formed within the joints and thus the joint is "frozen." In the cases of "frozen" hands, it is with great difficulty and untiring effort that complete or even partial function is restored. Swelling is indicative of strangulation and if the constriction is not removed, there is a possibility of gangrene resulting. Prolonged swelling can be prevented by elevation of the part in bed, hot wet dressings, complete immobilization and occasionally by cutting a cast that might be too tight. X-ray examinations are necessary in the diagnosis and the treatment of fractures. They are frequently unnecessary to determine simply if a fracture exists, but are necessary because of the importance to know the position of the fragments before treatment is undertaken. When there is a possibility of a broken bone a surgeon is foolish to treat the patient without X-rays as this might easily pave the way for litigation. Recently, I saw a patient who had been treated where X-ray facilities were not available. He had been given diathermy for a period of ten weeks but still had pain in his ankle. X-ray showed a fracture of both bones of the ankle with delayed union. In such a case, it might be necessary to operate on the ankle and possibly even to do a bone graft. This, of course, produces a long period of disability and there may even result a permanent disability. Many X-ray exposures can be made for the price of one permanent disability.

COMPOUND FRACTURES

If the fracture is a compound type, that is one in which the bone is exposed, immediate operative treatment of the wound and bone fragments is imperative. It has been stated that infection does not develop in less than twelve to twenty-four hours and that treatment of a compound fracture can be delayed for this length of time. This is exceedingly dangerous teaching. Proper cleansing of the wound should be done at the earliest possible moment. Infection may be well under way in six to eight hours, and it is better practice to make every possible effort to institute treatment within a period of four hours after the accident. A compound fracture always carries a poorer outlook than one in which the skin is not broken as there is always contamination with bacteria, and unless mechanical cleansing is done under a strictly sterile technique there will be a resultant infection of the part. If properly handled within a four hour period, almost every case will do as well as a simple fracture with open reduction. The matter of first importance is to render the wound surgically clean and to prepare the operative field. It makes no difference whether the wound is extensive or slight, the method is the same. The surgeon should scrub his hands for the usual full ten minute period and don sterile gloves. The wound itself is covered with sterile gauze, then a wide area surrounding is shaved and then washed with sterile soap and water, using sterile absorbent cotton. If the area is grossly covered with greasy dirt, it should be first cleansed with ether or benzene. The washing of the surrounding area should be done carefully, continuing for some ten to twenty minutes. Care should be taken not to allow the washings to run into the wound. After this area is carefully cleansed, fresh sterile gloves are put on and with a fresh supply of sterile material the wound itself is carefully washed for another period of ten to twenty minutes. Care is taken here not to further injure the tissues. Extensive irrigation with water or saline is carried out throughout the procedure. Antiseptics should not be applied to the wound

because those that are effective destroy tissue and thus an ideal culture medium for bacteria is created. If the fracture is mechanically of the type that needs internal fixation by the use of screws, plates, wires, or any of the other commonly used material, it is wise to apply them at the time of operation. If the wound is treated conservatively and realignment of the bone fragments is not obtained and a residual infection with a draining sinus is present, the golden opportunity to restore early function has been lost. The period of hospitalization or disability is increased many fold. A non-reduced infected compound fracture will be enormously expensive to the individual or to the insurance carrier, as there is a sequence of long hospitalization, non-union, repeated operations and possibly amputation. In addition to the medical expenses, there is frequently a permanent disability associated. Whenever a compound fracture is complicated by a lock jaw or gas gangrene infection, the situation then becomes exceedingly grave. To prevent such complications, there has been perfected antitoxins which are efficient and their routine use is urgently recommended.

LATER CARE OF FRACTURES

The later care of fractures involves a careful supervision until complete healing has taken place. X-rays are as valuable in the follow up care of a fracture as they are in the initial diagnostic period. Physical therapy is also very helpful and at times of great importance in the early restoration of function.

EXPECTED DISABILITY

There is expected to be a certain degree of temporary total disability in all bone injuries. In cases of skull fractures the extent of disability depends entirely on the damage done beneath the skull. Simple fractures of the skull heal readily but always there is some concomitant brain damage. At times there is seen a gross brain injury without apparent crack in the skull. In an uncomplicated simple fracture of the skull the patient should not be allowed to return to work in less than three months. Those with spinal column injuries will be disabled for a period of six months to one year. Here again gross injury may be done to the spinal cord and no apparent damage done to the bony structure. The disability of forearm fractures is usually from two to three months and hand fractures usually six weeks to three months. In the fracture of ribs there is frequently a very brief period of disability, the treatment being immobilization of the rib and patient is soon allowed to return to work. Of course, fractures of the ribs involving the lung structures are much more serious. Hip fractures are very serious injuries. If it is possible to do a modern hip nailing operation, the period of disability is a minimum, possibly three to six months. Otherwise, there is a disability of one year temporary total with a residual permanent partial. The average disability of fractures of the thigh bone or femur is from six to nine months and fractures of the leg below the knee from four to six months. Knee cap fractures are serious injuries. They should be operated on to reduce the period of disability. With operation, the disability is usually about three months. The long bones of the feet usually recover without permanent disability. The heel bone has to be reduced accurately and treated by rest for a long time. Disability from fractures of the foot bones is usually about two months, except fracture of the heel bone which carries a period of disability from four to six months.

Disability in compensation cases differs from that in usual private cases. The injured employee frequently will claim a longer disability than is generally true in uninsured individuals because he wants to take no chances on releasing the insurance company from responsibility. Whereas, the private case goes to the man of his choice, the insured person usually has no choice in his surgeon but is sent to one who take care of that particular company's work. There may be a lack of confidence in the surgeon and distrust in the insurance carrier, the patient knowing nothing about either. It is important that the doctor adjust the patient psychologically, gain his confidence and assure the patient that the result will be good. Assurance that he is going to be dealt with fairly and have adequate medical care is necessary to the patient in order to have a minimum resultant handicap.

There are instances in which the patient will

overemphasize his injury and feign disability. In such cases a snap-shot diagnosis is dangerous and a most careful scrutiny on the part of the surgeon is necessary.

The cooperation of the employer is very helpful and the period of disability may be appreciably reduced if the patient is given light work before he is actually capable of resuming his usual full time duties. Occupation takes his mind away from his troubles and may prevent legal proceedings.

SUMMARY

In this paper the following ideas have been briefly set forth:

1. Proper knowledge of first aid is important in handling all fracture cases.
2. Some principles underlying the surgical care of simple and compound fractures have been enumerated.
3. The approximate period of disability in certain fractures has been suggested.
4. The cooperation by patient, surgeon, employer and insurance carriers has been stressed.

SOCIETY REPORTS

CHESTER COUNTY MEDICAL SOCIETY MEETING

The Chester County Medical Society held its regular monthly meeting at the Pryor Hospital on December 2, 1938. Dr. W. J. Henry, President, presided. This being the last meeting for 1938, election of officers for the new year was held. Dr. F. S. Chance was elected President, Dr. J. P. Young was elected Vice-President, Dr. J. N. Gaston, Jr., was re-elected Secretary and Treasurer and Dr. W. R. Wallace was elected delegate to the State Convention.

Dr. A. M. Wylie read a most interesting paper on Peptic Ulcer in which he discussed the problem in its entirety and showed a film on the surgical management.

Respectfully submitted,

J. N. Gaston, Jr., Sec.

ANDERSON COUNTY MEDICAL SOCIETY MEETING

The Anderson County Medical Society met at the John C. Calhoun Hotel, Anderson, December 14, with Dr. John W. Martin, President presiding.

Members of the Anderson County legislative delegation were guests of the society at the luncheon and were thoroughly acquainted with health conditions in the county and also with the Anderson County Hospital. Appropriations for a proposed cancer clinic to be established in Anderson as well as appropriations for the county hospital were discussed during the course of the meeting.

At the business session the following officers were elected for the ensuing year, Dr. Herbert H. Harris, President, Dr. Ned Camp, Vice President and Dr. Herbert Blake, reelected Secretary-Treasurer.

GREENVILLE COUNTY MEDICAL SOCIETY MEETING

Dr. Emil Novak, associate in gynecology at Johns Hopkins Medical School in Baltimore, addressed a group of nearly 100 medical men gathered at the Poinsett Hotel, Monday night, January 2, for the Greenville County Medical Society meeting. Dr. Novak, who has gained international fame for his research into means of relieving male and female sterility, spoke on "The Endocrines in Gynecology."

Before the distinguished gynecologist spoke, a two-hour reception was held by the society for members and visitors and new officers for 1939 were installed. Dr. I. H. Grimball assumed office as President; Dr. C. P. Corn as Vice President; Dr. Mordecai Nachman as Secretary and Dr. R. M. Dacus, Jr., as Treasurer. Dr. Thomas Brockman was the retiring President.

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JANUARY, 1939

COUNCIL INDORSES FARM SECURITY ADMINISTRATION PLAN FOR MEDICAL CARE

At a meeting of the Council held in Columbia on December 12, Dr. R. C. Williams, Senior Surgeon, United States Public Health Service, and Mr. R. F. Kolb, State Director, presented a new plan for the medical care of some ten thousand clients of the Farm Security Administration in South Carolina.

The plan in brief means that these clients will be loaned a certain amount of money with which to pay physicians and hospitals for their illnesses. Physicians will present their bills in the usual fashion as in their private practice, each client having the privilege of selecting his own doctor. In some instances it is conceivable that there will not be sufficient funds to pay the bill in full, but the machinery will be set up in such a way as to provide a satisfactory adjustment. Each society will appoint a committee on grievances, and all matters pertaining to the working of the plan will be under the control of organized medicine. The general plan will be presented to each County Medical Society for consideration and action as the society sees fit. It appears that more than half of the state societies have indorsed the plan up to the present time.

The Council was presided over by Dr. T. A. Pitts, Chairman. In addition to those already named the following persons were present, Dr. J. R. Des Portes, President S. C. Medical Association; Dr. L. M. Stokes, immediate past president; Dr. E. A. Hines, Secretary-Treasurer; Dr. F. G. Cain; Dr. J. D. Harrison; Dr. Hugh Smith; Dr. Roderick Macdonald; Dr. Julian Price; Dr. E. T. Kelley; Mr. L. S. Wolfe, Farm Management Specialist; Miss Margaret M. McGirt, Associate State Director in charge of Home Management Plans; Mr. Taylor A. Prewitt, Jr., Associate Regional Cooperative Specialist and Mr. John Miley, Cooperative Specialist.

SOUTH CAROLINA MEDICAL ASSOCIATION MEETS IN SPARTANBURG, APRIL 11, 12, 13, 1939.

TITLES OF PAPERS WANTED

PROGRAM COMMITTEE

Many features of the Ninety First annual meeting of the Association have already been planned, but much work remains to be done. First of all, it is necessary to have a reasonable number of voluntary papers as has been the custom since the Association was organized in 1848. There will also be invited essayists in addition to the guest speakers from out of the

state. It has been generally conceded that the round table plan of discussing scientific subjects tried out for the first time at Myrtle Beach should be repeated.

Many of the committees in connection with the meeting have been appointed by the Spartanburg County Medical Society. Dr. D. L. Smith, Sr., is the General Chairman. The Program Committee appointed by the State Medical Association is as follows:

Dr. P. M. Temples, Chairman, Spartanburg
Dr. C. Williams Bailey, Spartanburg
Dr. W. M. Sheridan, Spartanburg

Titles of volunteer papers may be sent to the Chairman of the Program Committee or to the Secretary of the State Association.

SOME JOURNAL CHANGES

The Journal enters upon its thirty fifth year with this issue. From time to time improvements have been introduced looking toward a more attractive appearance as well as a more readable type. This is in line with the trend of developments amongst the state medical journals and the magazine world in general. A few of the State Journals have made radical changes in their cover designs particularly, but we have decided that a more conservative attitude will serve our purpose better at present and be more in line with the financial resources of our Journal.

We are providing for a new department on Pharmacy and Therapeutics in this issue under the direction of the School of Pharmacy of the University of South Carolina and cooperating with the School of Pharmacy at the Medical College, the South Carolina Pharmaceutical Association and other interests. This movement was accentuated at the Myrtle Beach meeting by the paper of Dr. Strother which appears in this issue and by the excellent pharmaceutical exhibit presented at the meeting. The New Jersey State Medical Society has been one of the great leaders in this country to promote a back to the U. S. P. and N. F. remedies on the part of the profession. We feel fully justified in taking this step since more than five hundred members of the Association have definitely approved of the plan proposed and also a large number of the druggists of the state. The paper by Dr. Strother deserves careful reading and we bespeak a thoughtful consideration of the new Department at the same time.

KEEP IN TOUCH WITH YOUR CONGRESSMEN NOW

President Des Portes has been very active in seeking personal interviews and by official correspondence in presenting the claims of organized medicine against all forms of compulsory socialized medicine to our Congressmen. Many other members of our official family and also many of the members of the State Association have done likewise. It is believed that this personal touch will go far toward influencing in the proper direction the minds of the representatives in Congress from South Carolina.

THE LEGISLATURE

South Carolina doctors have in the main secured the legislation most sought after for the good of the people whom they serve throughout our long history. This has come about by a mutual confidence and respect for the profession in this state. It is hoped that by and large this state of affairs may continue. It is certain that the medical profession has more at stake now than ever before from a legislative standpoint. It behooves every doctor to become more familiar with the problems and when called upon by the Legislative Committee of the State Association to render assistance that he be ready to respond. We do not know at this moment just what legislation will come up, but it is certain that a liberal appropriation for the Medical College will be one of our main objectives. Medical education has always been supported by the South Carolina Medical Association. The same is true of the State Board of Health appropriation.

DEATH OF DR. W. P. TIMMERMAN

The passing of Price Timmerman, as he was familiarly called, removes from the rolls of the South Carolina Medical Association one of its most enthusiastic and loyal members. Dr. Timmerman graduated from the Medical College of the State of South Carolina in 1891

and shortly thereafter became a member of the State Medical Association. Very few members approached his record of regular attendance at the meetings of the State Medical Association. Dr. Timmerman was one of the early Councilors of the State Association after the reorganization in 1904. He gave of his best in that capacity and was rewarded by being elevated after a service of some ten years to the Presidency of the Association. Following his year as the head of the profession in South Carolina he continued to serve the Association in numerous capacities. He gave many years of his life to the Secretaryship of the Ridge Medical Society and as a correspondent for the Journal was a never-failing inspiration to the Editor. Dr. Timmerman probably knew more physicians in the South Atlantic States than almost any other doctor. He made it a point to meet the members of the Association and as far as possible to meet their families. He knew the life history intimately of many hundreds of doctors. He was prominent in the affairs of several other medical organizations including the Tri-State Association of the Carolinas and Virginia and the Southern Railway Surgeons' Association. Dr. Timmerman's contributions to the literature of scientific medicine were not extensive but were well presented and always worth while.

As a citizen Dr. Timmerman's interests were far above those of the average man in the community. He was deeply concerned about the welfare of his fellow man and the honor and integrity of the State. He was called to many offices as a result of his interest in such affairs. During the World War he was the medical member of his County Exemption Board and subsequently was appointed Major in the Medical Reserve Corps. of the United States Army. He served the City of Batesburg at one period of his life as mayor. He was connected with the Leesville Infirmary for many years. He was a general practitioner of wide experience and as such will be sorely missed by a tremendous circle of patients and friends.

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GAS GANGRENE

Serum treatment in gas gangrene has now been used sufficiently long so that some idea may be gained concerning its efficacy. In a fairly recent article (Ann. Surg. 105:257 Feb. '37) Maurice T. Bates gives a general consideration of the disease with particular reference to this point. The basis of the report is the comparison of a series of 18 cases occurring before 1932 in which serum therapy played a minor part with a series between 1932-36 in which serum therapy was used routinely. In the group not treated with serum the mortality was 56% whereas in the serum treated group it was 12%. In view of the fact that the surgical treatment was essentially the same in the two groups the marked improvement is attributed to the serum therapy.

While gas gangrene is commonly spoken of as a C. welchii infection, it should be remembered that other anaerobes are important etiological factors—while only one organism may be present, generally two or more are involved—vibrion septique and C. oedematiens next in frequency to C. welchii which is present in 80% of the cases. One organism may produce gas, another putrefaction with resulting odor and still another edema. Accordingly the clinical picture varies. In addition pyogenic organisms may be present, streptococci increasing greatly the virulence of the infection. Bearing in mind that these anaerobes occur in the intestines of man and animals and in fertilized soil we can predict to some extent the types of wounds in which we may expect gas gangrene to develop, and accordingly give prophylactic treatment.

Gas gangrene is essentially a disease of muscle which has been traumatized. The infection spreads mainly along the long axis. Upon this conception of the pathology is based the rationale of debridement of the involved muscle as a means of avoiding amputation. Where the blood supply to the whole part has been seriously affected, amputation of course is necessary.

The infected muscle tissue becomes brick red in color, and edematous; it loses its contractility. Later it assumes a blackish-green appearance.

Whereas gas gangrene occurs most commonly after compound fractures and severe lacerations, it has been found to follow numerous other conditions such as gunshot wounds, operations upon the intestinal tract, child-birth, and hypodermic injections. Amputation for diabetic or arteriosclerotic gangrene is not infrequently followed by this infection.

In all cases of clinical infection in the two series positive cultures of C. welchii were obtained. It is to be noted that some cases with positive cultures presented no clinical evidence of infection; these are not included in the cases reported.

In types of injuries most likely to be complicated by gas gangrene a prophylactic dose of serum is advised—1500 units of antitetanic and 1000 each of C. welchii and vibrion septique antitoxin. In some cases this should be repeated. Prophylactic treatment should be given before amputation for diabetic or arteriosclerotic gangrene.

Effective treatment of gas gangrene is dependent upon early diagnosis. In the cases reported the number of injections varied from 1 to 21, however in the majority of cases only one or two were given. The author advises that the serum be given every four to eight hours as long as there remains evidence of infection as manifested by elevation of temperature, increased pulse rate, mental clouding or local signs. All involved tissue should be removed by debridement or amputation as conditions demand. The wound is left open to the air or covered with a light dressing of hydrogen peroxide. The local area is watched for evidence of recurrence, and if this develops it is treated accordingly. Blood transfusions are important on account of the hemolysis which frequently takes place. The treatment is a judicious combination of surgery and serum.

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REPORT OF THE SOUTHERN MEDICAL AUXILIARY CONVENTION IN OKLAHOMA CITY

By

Mrs. C. P. Corn, Greenville, S. C.

I had attended three other meetings of the Southern Medical Association in the past ten years besides this one in Oklahoma City. When we arrived at the station for the convention on a special from Atlanta, we were greeted by a squad of twenty-five or thirty cowboys on horses who rode right into the station and started lassoing the doctors and making some of them ride horses back to their hotels. This incident of course, gave the proper western atmosphere on our arrival.

The executive board meeting opened the convention. Being a member of the board, I attended this breakfast which is a compliment from the Southern Medical Association. Mrs. Luther Bach, President, was in the chair. The two main items of business at the board meeting were as follows:

First:—The appointing of a special Jane Todd Crawford committee to confer with the Advisory Council on a fitting memorial for Jane Todd Crawford. This committee will receive suggestions from the 17 states. The Kentucky Auxiliary had raised $1,000.00 as a fund toward this memorial and the check was presented at this meeting in honor of Mrs. Luther Bach, the President, who is from Kentucky.

The second important business of the board was the election of the nominating committee. This committee was composeed of five women from five different states, three members of the executive board and two who are not members of the board. Following the breakfast the regular morning session opened the 15th annual meeting of the Auxiliary.

The usual invocation, welcome address, and responses were heard, followed by reports of officers and committee chairmen. There were only two officers present, these being the Treasurer, and the Parliamentarian. There were six past presidents in attendance at this convention. The impressive memorial service concluded this morning's session and we proceeded to the luncheon meeting.

There were about six hundred women present at this event. The toastmistress was Mrs. Wm. Hibbetts of Arkansas, and she made a very clever one. Dr. Able, President of the American Medical Association and Dr. McCormack, President-elect of the Southern Medical Association were speakers, as well as the National President of the Auxiliary, Mrs. Tomlinson. Following this luncheon, one of the most beautiful fashion shows that I've ever witnessed took place. The models were all doctors wives of Oklahoma City and they were lovely and graceful—some better than professional models.

At the night sessions, there were most interesting speakers. Socialized medicine was one of the chief topics and all seemed to be against it. At the second night session Dr. Jervey gave his address and this was followed by a recep-

tion and ball. Before the ball a group of Indians in costume gave some of their native dances, and concluded by making Dr Jervey a chief, by placing a feathered head dress on him as a crown.

At the next morning session of the Auxiliary the reports of the Councillors were heard. These were the state reports and were most interesting. The President, Mrs. Bach, next gave her report. Then the report of the nominating committee and election of officers took place. The following officers were elected:

President, Mrs. W. K. West, Oklahoma City, Okla.; President-Elect, Mrs. Chas. P. Corn, Greenville, S. C.; First Vice-President, Mrs. L. J. Moorman, Oklahoma City Okla.; Second Vice-President, Mrs. Olin Cofer, Atlanta, Ga.; Recording Secretary, Miss Grace Stroud, Louisville, Ky.; Treasurer, Mrs. K. W. Cosgrove, Little Rock, Ark.; Parliamentarian, Mrs. Gordon Ira, Jacksonville, Fla.; Historian, Mrs. W. W. Crawford, Hattisburg, Miss.

The installation service for the new officers then took place. Courtesy resolutions were heard and the meeting adjourned, after the gavel was presented to the new President, Mrs. West.

A 25 mile trip to Norman Oklahoma was an entertainment feature of the next morning. During the convention Dr. Corn and I attended a lovely buffet supper given by Dr. and Mrs. West for the officers, and a few other smaller affairs in the city. A beautiful tea at the country club, and a sight seeing trip to see the oil wells was most interesting. It was a wonderful convention, and the hospitality was unexcelled. The next convention will be in Memphis, Tennessee and I hope all of you will plan to attend.

COLUMBIA MEDICAL AUXILIARY MEETING

The Columbia Auxiliary to the South Carolina Medical Association held its first meeting of the fall at the home of Mrs. George Bunch Tuesday morning the first of November. Mrs. Izard Josey, the President, presided and the report of all activities of the organization were read.

Dr. W. A. Hart gave a talk in which he fully outlined the program of the recently organized Maternal Health Center in Richland County. The purpose of this organization is to advise patients, after complete examinations, with regards to future childbearing; the physically unfit are taught pregnancy spacing to relieve them of the burden of repeated pregnancies at short intervals and the childless are advised corrective measures. All applicants to this clinic are carefully investigated and no patients are accepted that are financially able to pay for this advice and the marital status is established to prevent the abuse of the clinic facilities.

Doctor Hart paid tribute to the able assistance rendered by Mrs. Izard Josey as treasurer and Mrs. Emmet Madden as clinic nurse who are serving without pay at these clinics which are held once a week.

Mrs. J. H. Cutchin,
Publicity Secretary.

SPARTANBURG MEDICAL AUXILIARY MEETING

The first meeting of the Auxiliary to the Spartanburg County Medical Society met on Tuesday at the home of Mrs. John Fleming on Sherwood Circle with Mrs. Robert Dennis Hill, Mrs. D. C. Alford and Mrs. W. R. Esdale as joint hostesses.

Mrs. Hill was in the chair and after the meeting was called to order the business of the Auxiliary was discussed.

Five new executives were elected for the coming year and they are as follows: Mrs. Jesse O. Wilson, second vice-president and program director; Mrs. P. M. Temples as secretary; Mrs. J. C. Josey as treasurer; Mrs. H. E. Heinitsh county chairman for publication and Mrs. W. R. Esdale chairman for publicity.

Mrs. E. B. Saye was welcomed as a new member.

The Auxiliary voted to donate the place cards for the coming Nurses banquet to be held at the country club.

Of especial interest was the cup won last year for the scrap book in the State. This cup becomes permanent if won again this year.

The Secretary read an interesting letter from

Mrs. T. R. W. Wilson State Councillor who urges that an interesting and constructive program be presented at each of the meetings.

The meeting adjourned and tea was served by the hostesses.

Mrs. J. H. Cutchin,
Publicity Chairman.

GREENVILLE MEDICAL AUXILIARY MEETING DEC. 5, 1938

Dr. John F. Rainey, local heart specialist, was the speaker at the opening meeting of the Auxiliary to the Greenville County Medical Society here Monday afternoon, December 5, at the home of Mrs. J. Warren White on Hillcrest Drive, a meeting over which Mrs. J. L. Sanders, president of the Auxiliary, presided. and which was attended by approximately 55 members and guests.

The meeting was marked by the presence of a number of distinguished guests, among whom were Mrs. Charles P. Corn, president-elect of the Auxiliary to the Southern Medical Association; Mrs. C. C. Ariail, president of the Auxiliary to the South Carolina Medical Society; Mrs. W. B. Furman of Easley, President-elect of the State Auxiliary; and Mrs. J. W. Kitchen, of Liberty, president of the Auxiliary in her city.

Mrs. Corn, who attended the recent meeting of the Southern Auxiliary in Oklahoma City, spoke briefly of that interesting and important event, after she had been introduced by Mrs. Sanders. The Greenville Auxiliary enjoys a distinction that can be claimed by few other organizations in that both the president-elect of the Southern Auxiliary and the president of the State Auxiliary are among its members. Mrs. Corn is the first president that South Carolina has given to the Southern Medical Auxiliary which is composed of representatives from 17 states.

The president and one representative from each of the federated clubs of the city were invited to the meeting and with members of the Auxiliary, enjoyed the unusually entertaining talk by Dr. Rainey, who spoke on "Heart Disease—It's Prevention and Cure." He also showed an interesting and enlightening film of an ox heart in action. Dr. Rainey's address was in line with the special health program which the Auxiliary is sponsoring this year.

The Auxiliary voted a one-year subscription to "Hygeia" for the Red Shield Club rooms.

Following the program of the afternoon, a social hour was enjoyed while the hostesses, Mrs. White, Mrs. Mordecai Nachman, Mrs. Herbert Bailey, Mrs. B. C. Bishop, Mrs. W. W. Edwards, Mrs. Everett Poole, Mrs. Frank Daniel, Mrs. J. H. Crooks, and Mrs. R. M. Pollitzer, served tea, sandwiches, and cakes.

THIRD DISTRICT MEDICAL MEETING

The Third District Medical Society met at the Country Club, Newberry, S. C., Thursday, November 10, 7:00 P. M., with Dr. E. H. Moore of Newberry, President of the District presiding.

A delicious turkey dinner was served by the ladies of the Calvin Crozier Chapter of the United Daughters of the Confederacy after which the following program was carried out.

Address of Welcome-Honorable Thos. H. Pope, Jr., of Newberry.

The Evolution of Thyroidectomy, with lantern slides and moving pictures by Dr. Addison G. Brenizer of Charlotte, N. C., read by Dr. R. E. Able of Newberry.

Fractures—Some Fundamental principles in Their Treatment by Dr. A. T. Moore and Dr. Green of Columbia.

Head Injuries by Dr. Roger G. Doughty of Columbia.

Coronary Thrombosis by Dr. Emmett L. Madden of Columbia.

The business session was then entered into and the following officers were elected for the ensuing year: Dr. W. P. Turner, President; Dr. J. E. Brodie, Vice-President; Dr. C. J. Scurry, Secretary, all of Greenwood. The next meeting will be held at Greenwood.

PHARMACY AND THERAPEUTICS

BULLETIN NO. 2

Dear Doctor:

Over 500 South Carolina physicians have replied to the letter sent to them by the Extension Division in regard to the U. S. P. and N. F. drugs. This excellent response confirms the committee's belief that you are interested in a program of this nature and that you would appreciate further information on official drugs.

In our first letter we tried to explain to you the financial disadvantages imposed upon the patient and the pharmacist, as well as upon you, by prescribing high priced specialties when an official preparation was available. It may be at times a disadvantage to the pharmacist for you to specify a particular company for an official product. Numerous reliable companies manufacture the official preparations recognized in the U. S. P. and N. F. The Extension Committee, therefore, suggests that, when possible, the name of the company making an offical drug be omitted, and that the prescription be sent to a pharmacist who buys his stock from reliable companies.

Recently a physician requested information from his pharmacist on a certain proprietary preparation that was costing the patient $1.75 for each prescription. As a result of that conversation the patient is now getting a medicine compounded from official drugs for less than half of the original price; and in addition the druggist's profit was also increased. It is with these thoughts in mind that we recommend that you refer to the enclosed list of official and non-official drugs and give deserving consideration to your pharmacist and to your patients' financial interest when writing a prescription.

Your pharmacist is your best friend. Let him help you more.

Professionally yours,

W. D. Strother, Chairman,
U. S. P. and N. F.
Extension Committee
School of Pharmacy,
University of S. C.

A partial list showing some comparative prices of proprietary drugs with, in many instances, identical equivalent official drugs; and in other instances with preparations or chemicals that are so closely related that the superiority of one over the other has not been generally accepted.

Prices have been taken from the May, 1938, issue of the Druggist Circular Red Book, the July, 1938, issue of the American Druggist's Blue Book, and in a few instances from wholesale druggists. All prices quoted are wholesale.

Proprietary or Brand Name		U. S. P., N. F. or Chemical Name	
Adalin Tablets, per 100 tablets	$3.00	Carbromal Tablets, per 100 tablets	$2.00
Argyn, per oz.	0.96	Mild Silver Protein, per oz.	0.51
Argyrol, per oz.	1.50	Mild Silver Protein, per oz.	0.51
Aristol, per oz.	1.80	Thymol Iodide, per oz.	0.43
Aspirin (Bayer), per oz.	0.75	Acetylsalicylic Acid, per oz.	0.13
Atophen, per oz.	2.75	Cinchophen, per oz.	0.38
Cargentos, per oz.	1.02	Mild Silver Protein, per oz.	0.51
Chloretone, per oz.	1.00	Chlorobutanol, per oz.	0.33
Cresotal, per lb. bottle	9.12	Creosote Carbonate, per lb. bottle	2.38
Diuretin, per oz.	1.85	Theobromine with Sodium Salicylate, per oz.	0.27
Duotal, per oz.	1.07	Guaiacol Carbonate, per oz.	0.29
Empirin, per lb.	2.74	Acetylsalicylic Acid, per lb.	0.92
Empirin Tablets, per 100 tablets	0.85	Acetylsalicylic Acid Tablets, per 100	0.25
Kelene, per 100 grams	2.00	Ethyl Chloride, per 100 grams	1.40
Luminal Powder, per ½ oz.	3.45	Phenobarbital Powder, per ½ oz.	0.34
Luminal Sodium Powder, ½ oz.	3.45	Phenobarbital Sodium Powder, ½ oz.	0.34

Luminal Tablets, ¼ gr. each, per 100 tabs.	0.63
Luminal Tablets, ½ gr. each, per 100 tabs.	1.25
Luminal Tablets, 1½ gr. each, per 50 tabs.	1.25
Luminal, Elixir of, per gallon	18.13
Lunargen, per oz.	1.02
Medinal, per oz.	3.00
Metaphyllin Powder, per 25 grams	6.60
Metaphyllin Tablets, per 100 tablets	3.40
Neuronidia, ½ pint	2.50
Prontylin, per 1000 tablets	8.13
Protargol, per oz.	1.25
Pyramidon Powder, per oz.	0.82
Pyramidon, Elixir, per gallon	18.13
Silloid, per oz.	1.50
Salysal, per oz.	0.85
Silosan, per oz.	0.60
Silosan Tablets, per 100 tablets	0.67
Solargentum, per oz.	0.52
Sulfanol, per oz.	1.70
Theocin Soluble, per ½ oz.	2.50
Theominal Tablets, per 100 tablets	2.75
Thiocol, per oz.	1.50
Tolysin, per oz.	2.00
Trional, per oz.	1.90
Urotropin, per oz.	0.25
Vaseline (Yellow) per lb.	0.20
Vaseline (White) per lb.	0.40
Veronal, per oz.	3.00
Veronal, Elixir of, per 12 oz.	2.00
Veronal, Sodium, per oz.	3.00
Phenobarbital Tablets, ¼ gr. each, per 100 tabs.	.21
Phenobarbital Tablets, ½ gr. each, per 100 tabs.	.25
Phenobarbital Tablets, 1½ gr. each, per 100 tabs.	.44
Phenobarbital, Elixir of, per gallon	3.00
Mild Silver Protein, per oz.	0.51
Barbital, per oz.	0.62
Aminophyllin Powder, per oz.	1.75
Aminophyllin Tablets, per 100 tablets	0.75
Elixir of Barbital, per ½ pint	0.40
Sulfanilamide, per 1000 tablets	4.98
Strong Silver Protein, per oz.	0.51
Aminopyrine Powder, per oz.	0.47
Aminopyrine, Elixir, per gallon	9.12
Mild Silver Protein, per oz.	0.51
Acetylsalicylic Acid, per oz.	0.13
Acetylsalicylic Acid, per oz.	0.13
Acetylsalicylic Acid Tablets, per 100 tabs.	0.25
Mild Silver Protein, per oz.	0.51
Sulfonnethane, per oz.	0.57
Theophyllin with Sodium Acetate, per ½ oz.	0.39
Theobromine-Phenobarbital (plain) per 100 tabs.	1.40
Potassium Guaiacolsulfonate, per oz.	0.25
Neo-Cinchophen, per oz.	1.04
Sulfonethylmethane, per oz.	0.57
Methenamine, per oz.	0.15
Petrolatum (Yellow) per lb.	0.11
Petrolatum (White) per lb.	0.19
Barbital, per oz.	0.62
Barbital, Elixir of, per ½ pint	0.40
Barbital, Soluble	0.62

OCONEE COUNTY MEDICAL SOCIETY MEETING

The Oconee County Medical Society met at Walhalla, December 8, 3:30 P. M., Dr. E. C. Doyle, the President, presiding. The minutes of the last meeting were read and approved.

Dr. W. E. Baldwin the new Health Officer of Oconee County on invitation presented certain problems for consideration by the society among which was a request that the society approve of establishing clinics for the treatment of indigent syphilitics at Seneca and if necessary at Westminster. The society favored the plan proposed. The society also approved of the proposed visit of the State Board of Health Tuberculosis Traveling Clinic to the County during the month of February.

A discussion of the treatment of Farm Rehabilitation clients in Oconee County with other government health relief matters was entered into. Important matters about the Oconee County Hospital which has been completed and is now being equipped, were brought to the attention of the members of the society. The following officers were then elected for the ensuing year.

Dr. T. G. Hall, President, Westminster, S. C.; Dr. F. T. Simpson, Vice President, Westminster, S. C.; Dr. E. A. Hines, Secretary-Treasurer, Seneca, S. C.; Dr. James E. Orr, Delegate to the State Medical Association Convention, Seneca, S C.

The delegate to the State Medical Association Convention was given the privilege of appointing his alternate in the event that he could not go. In addition to the regular members present there were two visitors, Dr. J. P. Booker of Walhalla and Dr. J. B. Wallace of Fountain Inn. There being no further business the Society adjourned.

E. A. Hines, M. D., Secretary

Pathological Conference, Medical College of the State of South Carolina

KENNETH M. LYNCH, M. D., PROFESSOR OF PATHOLOGY

Case of Dr. W. H. Kelley
ABSTRACT NO. 370 (47382)
October 7, 1938

Student Agnew (presenting).

Admitted May 8, 1938, died May 9, 1938.

The patient, a white male of 50 years of age, a laborer, admitted with the complaint of vomiting. Patient's condition was such that only a scant history was obtainable. On 5-5-38, he ate usual evening meal then drank some whiskey. Several hours later began to vomit undigested food. Nausea and vomiting continued until 7 P. M. of 5-7-38. Had been rather constipated and was given castor oil on evening of 5-5-38 and bowels were rather loose up until the time of admission. No pain except soreness of abdominal muscles attributed to vomiting. Has been a worker around T. N. T. for past 9 years. Had two similar attacks of epigastric pain, the last several months ago.

Physical examination: A well developed and obese white male of apparent stated age. There was profuse diaphoresis, the skin cold and clammy, the mucous membranes pale, the pulse weak and thready and the blood pressure too low to be accurately recorded. The respirations were rapid and shallow. Chest clear to percussion and auscultation. Heart of normal size to percussion. P. M. I. was weak and not well localized. Cardiac rate rapid, rhythm regular, heart sounds distant and of poor quality. No murmurs heard of thrills palpable. Eye grounds negative. The abdomen was obese and fairly right. There was tenderness to deep pressure over the entire abdomen, most marked over the epigastrium but with no definite localization. No organs or masses palpable. Peristalsis not visible but heard on auscultation. Genitalia not remarkable. Reflexes uniformly hypoactive.

Laboratory: Voided specimen of urine (5-8-38) alkaline in reaction, sp. gr. 1,007, albumen I plus, sugar negative, acetone negative, casts negative, occasional pus cell, blood negative, bacteria 4 plus. Blood (5-8-38) W. B. C. 24,000, Neutrophiles 93%, Lymphocytes 7%. Blood chemistry, (5-8-38) Urea Nitrogen 46.5 mgms., Creatinine 3.2 mgms., Sugar 182 mgms.

Course: Patient in the hospital 16 hours. Condition did not improve with general supportive measures such as application of external heat, intravenous fluids and stimulants. Nausea and vomiting of small amounts of dark brown fluid continued. The admission temperature was 97.6 with a terminal rise of temperature to 102.6 and patient expired at 3:40 A. M. 5-9-38.

Dr. Kelley: Mr. Greenberg, will you open the discussion?

Student Greenberg: In discussing this case because of its acute onset, there are several conditions that we must rule on as possibilities. First I would think of a perforated peptic ulcer. This would produce profound shock with nausea, vomiting and epigastric pain. There was however, no previous history of pain in relation to meals. Also, on physical examination the liver dulness was not obliterated as it would be from the presence of air from a perforated viscus, and an X-ray was not taken to substantiate this finding. A laparatomy would be required to definitely diagnose this condition. In intestinal obstruction one would expect an elevation of temperature with pain, distension and vomiting of fecal material. In absence of vomiting and abdominal distention I would rule this out. Mesenteric thrombosis could not be ruled out, but corroborative evidence as advanced arterial disease, with a cardiac lesion and eye ground changes were absent. Acute hemorrhagic pancreatitis could neither be ruled in or out. In any obese person over 50 years of age, with an acute onset of pain, vomiting and associated hyperglycemia, it could only be determined by laparatomy. In the advent of acute cholecystitis one would expect pain radiating to the back, but this alone would not rule the condition out. Acute appendicitis would produce all the symptoms observed in this man and would necessitate a laparatomy. Tabetic crises could produce fulminating abdominal pain simulating an intra-abdominal lesion but this has been ruled out in the history. Coronary occlusion could be ruled out definitely by an EKO. Also the leucocyte count of 24,000 with 93% polymorphonuclears is more characteristic of another lesion. In renal colic one would expect hematuria and pain radiating to the genital region. Food poisoning would be a possibility but one would expect an acute onset after a meal. Also food poisoning does not usually cause acute abdominal pain, vomiting, diarrhea and shock being the predominating symptoms. He has worked around T. N. T. for past several years but this type of poisoning is of a chronic nature and produces an unusual blood picture. We might think of cholera but it is unusually uncommon and occurs in epidemic form.

The things that could not be ruled out, in the order of their frequency are ruptured appendicitis, perforated peptic ulcer, acute pancreatitis and mesenteric thrombosis. These could be ruled out as producing symptoms of shock, with a high leucocyte count and localizing abdominal symptoms.

Dr. Kelley: Mr. Padykula, do you agree?

Student Padykula: I can't add further diagnostic possibilities but would think of mesenteric thrombosis or acute pancreatitis as most probable.

Dr. Kelley: What do you think of the possibility of tabetic crisis?

Student Padykula: With a negative history and no positive findings of central nervous system syphilis it is unlikely that the lesion could be explained on this basis.

Dr. Kelley: What is the mortality rate of gastric crises:

Student Padykula: As far as I know it is negligible.

Dr. Kelley: Mr. Porter, what do you think?

Student Porter: Outside the abdomen there are certain circulatory disturbances which may lead the clinican to an erroneous diagnosis of an acute surgical abdomen, notably: angina pectoris may cause referred abdominal pain and shock indistinguishable from an intra-abdominal lesion. This may also be associated with coronary thrombosis or embolism. An aneurysm of abdominal aorta may cause severe pain by eroding the vertebral bodies. It is however usually of long duration and not likely to produce sudden crises. Tuberculous caries of spine, similarly may produce pain but it is of long duration and usually associated with foci of tuberculosis in the lungs or elsewhere. Most of these things could be ruled out but I would suggest a mydriatic test for acute pancreatitis. This is done by placing a few drops of adrenalin in the eye which produces an irregular dilatation of the pupil in the presence of an acute pancreatic lesion. It is about 50% reliable.

Dr. Kelley: Does any member of the staff wish to participate?

Dr. Prioleau: Before the discussion started, I believed this patient was suffering from an acute pancreatitis, and I wish to defend this diagnosis. This patient presents a very severe abdominal catastrophy, more severe than the usual. Also there was persistent vomiting. There were also two previous attacks which are consistent with the usual story of acute pancreatitis. The high blood sugar points to a wide spread pancreatic lesion involving the islands of Langerhans. However I would not be willing to rule out acute appendicitis because after 50 years of age it may present some unusual findings.

Dr. Kelley: There was not much we could do for this man because he was in extremis on admission, and we were certain that he was suffering from a major abdominal catastrophy, either a perforated gastric ulcer or an acute pancreatitis. In the former condition a flat plate of the abdomen might have revealed the presence of air beneath the diaphragm, particularly if it were possible to sit the patient in the erect position.

Dr. Lynch: Before going further I would suggest that we eliminate such terms as an acute abdomen or an acute surgical abdomen from our nomenclature. The word acute signifies a rapid onset and I think the designation acute abdominal catastrophy is much more accurate for these cases.

I am surprised that dissecting aneurysm was not mentioned among the possibilities, as it is a good deal more common than many of the possibilities enumerated. This is a case of acute pancreatitic necrosis, the pancreas being the site of a large infarct. The pancreas is swollen and hemorrhagic with considerable disintegration toward the tail, grading out to a localized hemorrhage in the head. A thrombus was found in the pancreatic artery and I thought at the time of athermatous lesions in the arterial wall as being the predisposing cause. On re-examination, however, I believe it to be an embolus and not a thrombosis, as there is practically no change in the arterial wall and the clot could easily be dislodged. In addition, the abdominal aorta shows extensive intimal athermatous changes with an area of intimal necrosis and thrombosis that might readily give rise to a vascular embolism.

Acute pancreatitis may arise on the basis of (1.) vascular or (2) duct change. The former is more common but chronic infection of the ducts may cause areas of necrosis in the pancreatic tissue with self digestion and fat necrosis following activation of the trypsin ferments. The gross anatomic and clinical pictures of the two conditions are identical but are based on separate mechanisms.

Dr. Prioleau: Was the peritoneum and kidney involved?

Dr. Lynch: There was no generalized peritonitis or free fluid but a few spots of fat necrosis in the mesentery.

Then a slide was shown and Dr. Lynch pointed out an ulcerated necrotic condition of the intima of the aorta with attached thrombus which in all probability was responsible for vascular occlusion in the pancreas.

SOCIETY REPORTS

PEE DEE MEDICAL ASSOCIATION MEETING

The Pee Dee Medical Association held its annual meeting at the Hotel Florence, Florence, S. C., November 29, 7:00 P. M., with Dr. W. L. Byerly of Hartsville, President, presiding. A Dutch Dinner was enjoyed in the dining room of the hotel after which an interesting scientific program to which distinguished guests were invited to contribute was carried out.

Dr. Julian Ruffin, head of the Out Patient Department, Department of Internal Medicine, Duke University Medical School, who has made extensive studies in the field of Pellagra and is one of the pioneers in the use of Nicotinic Acid in the treatment of this disease spoke on Pellagra. He illustrated his talk with lantern slides.

Dr. Hines Roberts, head of the Department of Pediatrics, Emory University Medical School, is recognized throughout the country as an outstanding pediatrician. He has made special studies in the problem of otitis media and mastoiditis in children from the standpoint of the medical attendant. He spoke on The Problem of Otitis Media and Mastoiditis in General Practice.

Dr. James Ravenel, head of the Department of Urology, Medical College of South Carolina is an outstanding urologist in the state and a gifted speaker. His discourse was entitled Prostatic Calculi.

This was said to have been the most successful and enthusiastic meeting that had been held in recent years. A large number of physicians from the Pee Dee and other sections of the state were present.

REPRINTS

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NEWS ITEMS

The South Carolina Medical Association is entering upon its ninety-first year and the Journal upon its thirty-fifth year. On the front cover of this issue of the Journal the Seal of the Association reappears after some years of absence. This feature is in line with the policy of several state Journals and also the Journal of the British Medical Association. It is fitting that the members of the Association be given the opportunity at times to familiarize themselves with the Seal of the Association.

Dr. John J. Lindsay, 73, a practicing physician for more than 50 years in Spartanburg, died January 5, at a local hospital after a short illness.

He was a member of the Spartanburg County Medical Society and an Honorary Fellow of the State Medical Association. He was the son of the late Dr. J. O. Lindsay and Mrs. Amanda Drennan Lindsay and was a native of Due West. His father was for more than 50 years a well-known Presbyterian minister.

After graduation from Erskine College at Due West, Dr. Lindsay studied pharmacy and medicine at the Medical College of the University of Maryland.

Survivors are his wife, two sons and a daughter. Funeral services were held January 6 at 4 P. M.

The Journal of the South Carolina Medical Association is one of the few Journals in the United States that publishes a report of the Pathological Conferences at the State Medical College. These reports are widely read throughout the country and appreciated.

Readers of the Journal should read and reread the new section on Pharmacy and Therapeutics as it will appear from month to month.

Dr. P. M. Temples of Spartanburg is the Chairman of the Program Committee of the State Association and titles of volunteer papers should be sent to him as early as possible as the program will be limited as usual to about twenty-five or thirty papers.

The Journal has had recently some urgent requests for assistance in learning of young physicians who would be interested in locating in the smaller towns in South Carolina. Such physicians may write to the Journal for the names of these locations.

The Buncombe County Medical Society of Asheville is getting out a County Society Bulletin this month which is highly creditable and is being sent to a large number of physicians in South Carolina.

SPARTANBURG MEDICAL SOCIETY MEETING

Officers for the coming year and plans for the annual convention of the South Carolina Medical Association meeting to be held at Spartanburg, April 11, 12, 13, were made at the December meeting of the Spartanburg County Medical Society.

Dr. J. T. Carter was named President of the county society, succeeding Dr. P. M. Temples, Dr. Claude S. Finney was elected Vice President to succeeed Dr. Herbert Smith. Dr. Leon Poole was reelected secretary and treasurer for the coming year.

Other officers elected included delegates to the state convention. Dr. John Fleming and Dr. D. Lesesne Smith, Jr., were new delegates named. Dr. Smith will succeed Dr. George Thompson, who will attend the convention as Vice President of the State Association. Dr. William Sheridan continues his term in the delegation.

Dr. D. C. Alford was elected as a new member of the Board of Censors, which also consists of Dr. R. E. Poole and Dr. R. G. Anderson.